

CLAIMS

1. (Currently Amended) Fluid management apparatus comprising:

a substrate having a first surface and a second surface which is opposite to the first surface;

a plurality of fluid inlets which are formed in a first pattern in the first surface of the substrate and comprise first opening cross-sections;

a plurality of fluid outlets which are formed in a second pattern, which is different from the first pattern, in the second surface of the substrate and comprise second opening cross-sections which are smaller than the first opening cross-sections; and

a plurality of fluid ducts formed in the substrate, each fluid duct connecting a fluid inlet with a fluid outlet such that each fluid outlet is in fluidic communication with exactly one fluid inlet;
wherein the first pattern defines spacings between adjacent fluid inlets which are larger than spacings between adjacent fluid outlets defined by the second pattern.
2. (Cancelled)
3. (Original) Fluid management apparatus as claimed in claim 1, wherein the fluid inlets in the first pattern are arranged in the raster scheme of microtiter plates.
4. (Original) Fluid management apparatus as claimed in claim 1, wherein the fluid inlets define fluid reservoirs which are chargeable from the first surface.
5. (Original) Fluid management apparatus as claimed in claim 1, wherein the fluid outlets are arranged in a raster in which analytes are to be applied onto a biochip.

6. (Original) Fluid management apparatus as claimed in claim 1, wherein the fluid inlets in the first pattern are arranged in a first microtiter plate raster scheme, and wherein the fluid outlets in the second pattern are arranged in a second microtiter plate raster scheme.
7. (Original) Fluid management apparatus as claimed in claim 1, wherein the fluid ducts are dimensioned such that a fluid is movable through the same by capillary forces.
8. (Original) Fluid management apparatus as claimed in claim 1, wherein the substrate consists of silicon, a silicon-glass compound, a metal or a ceramic.
9. (Original) Fluid management apparatus as claimed in claim 1, wherein the substrate consists of a plastic or a polymer.
10. (Original) Fluid management apparatus as claimed in claim 1, wherein the substrate comprises several levels and wherein the fluid ducts are distributed among the several levels.
11. (Original) Fluid management apparatus comprising:
 - a substrate having a first surface and a second surface which is opposite to the first surface;
 - a plurality of fluid inlets which are formed in a first pattern in the first surface of the substrate and which are arranged in the raster scheme of microtiter plates;
 - a plurality of fluid outlets formed in a second pattern, which is different from the first pattern, in the second surface of the substrate; and
 - a plurality of fluid ducts formed in the substrate, each fluid duct connecting a fluid inlet with a fluid outlet such that each fluid outlet is in fluidic communication with exactly one fluid inlet.

12. (Original) Fluid management apparatus as claimed in claim 11, wherein the first pattern defines spacings between adjacent fluid inlets which are larger than spacings between adjacent fluid outlets defined by the second pattern.
13. (Original) Fluid management apparatus as claimed in claim 11, wherein the fluid inlets define fluid reservoirs which are chargeable from the first surface.
14. (Original) Fluid management apparatus as claimed in claim 11, wherein the fluid outlets are arranged in a raster in which analytes are to be applied onto a biochip.
15. (Original) Fluid management apparatus as claimed in claim 11, wherein the fluid inlets in the first pattern are arranged in a first microtiter plate raster scheme, and wherein the fluid outlets in the second pattern are arranged in a second microtiter plate raster scheme.
16. (Original) Fluid management apparatus as claimed in claim 11, wherein the fluid ducts are dimensioned such that a fluid is movable through the same by capillary forces.
17. (Original) Fluid management apparatus as claimed in claim 11, wherein the substrate consists of silicon, a silicon-glass compound, a metal or a ceramic.
18. (Original) Fluid management apparatus as claimed in claim 11, wherein the substrate consists of a plastic or a polymer.
19. (Original) Fluid management apparatus as claimed in claim 11, wherein the substrate comprises several levels and wherein the fluid ducts are distributed among the several levels.